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Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

1. (Original) A method of increasing utilization of user link bandwidth for a code division multiple access communications system comprising the steps of:

selecting a set of orthogonal complex codes each having a code length that is greater than a code length of an optimum real code and less than or equal to a spreading code length; and

transferring symbols across at least one of a plurality of user links to or from at least one of a corresponding plurality of user terminals wherein the symbols are represented by a corresponding one of the set of orthogonal complex codes.

2. (Original) The method of Claim 1 wherein the set of orthogonal complex codes is generated from a Kronecker tensor product given by formula:

$$C_{L X P} = A_L \otimes W_P$$

wherein

$C_{L X P}$ is a matrix of orthogonal complex codes wherein each of the orthogonal complex codes has a code length equal to L X P,

L is a positive integer,

P equals 2^n where n equals a positive integer,

W_P is a Walsh code matrix for a code length of P,

A_L is a matrix of coefficients a_{jk} wherein j is a row index equal to 1 ... L, k is a column index equal to 1 ... L, and

$$a_{jk} = e^{j2\pi(j-1)(k-1)/L}.$$

3. (Original) The system of Claim 1 wherein the corresponding one of the set of orthogonal complex codes has a code length of 12.

4. (Original) The system of Claim 1 wherein the spreading code has a code length of 12.

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5. (Original) A code division multiple access communications system comprising:

a base station;

a geo-stationary platform;

a feeder link coupled to the base station and the geo-stationary platform for transferring symbols between the base station and the geo-stationary platform;

a plurality of user terminals; and

a plurality of user links coupled respectively to the plurality of user terminals and to the geo-stationary platform for transferring symbols between the geo-stationary platform and at least one of the plurality of user terminals wherein the symbols are represented by at a corresponding one of a set of orthogonal complex codes having a code length that is greater than a code length of an optimum real code and less than or equal to a spreading code length.

6. (Original) The system of Claim 5 wherein the set of orthogonal complex codes is generated from a Kronecker tensor product given by:

$$C_{L X P} = A_L \otimes W_P$$

wherein

$C_{L X P}$ is a matrix of orthogonal complex codes wherein the at least one of the orthogonal complex codes has a code length equal to L X P,

L is a positive integer,

P equals 2^n and n equals a positive integer,

W_P is a Walsh code matrix for a code length of P,

A_L is a matrix of coefficients a_{jk}, where j is a row index equal to 1 ... L, k is a column index equal to 1... L, and

$$a_{jk} = e^{j2\pi(j-1)(k-1)/L}.$$

7. (Original) The system of Claim 5 wherein the at least one of the set of orthogonal complex codes has a code length of 12.

8. (Original) The system of Claim 5 wherein the spreading code has a code length of 12.

9. (Original) A method of increasing utilization of user link bandwidth in a code

division multiple access communications system comprising the steps of:

selecting a spreading code length; and

selecting a set of orthogonal complex codes each having a code length that is greater than a code length of an optimum real code and less than or equal to the spreading code length.

10. (Original) The method of Claim 9 further comprising the step of transferring symbols across a user link to or from a user terminal wherein the symbols are represented by a corresponding one of the set of orthogonal complex codes.